



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2017-0967; Product Identifier 2017-NE-35-AD]

RIN 2120-AA64

Airworthiness Directives; GE Aviation Czech s.r.o. Turboprop Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for GE Aviation Czech s.r.o. M601D-11, M601E-11, M601E-11A, M601E-11AS, M601E-11S, M601F, H80, H80-100, H80-200, H75-100, H75-200, H85-100, and H85-200 turboprop engines.

This proposed AD was prompted by a review by the manufacturer that identified the possibility of a power turbine (PT) rotor overspeed and the uncontained release of PT blades. This proposed AD would require installing a modified engine outlet system. We are proposing this AD to address the unsafe condition on these products.

DATES: We must receive comments on this NPRM by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, Room W12 140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

- Fax: 202-493-2251.

For service information identified in this proposed AD, contact GE Aviation Czech s.r.o., Beranových 65, 199 02 Praha 9 – Letňany, Czech Republic; phone: +420 222 538 111; fax: +420 222 538 222. You may view this service information at the FAA, Engine and Propeller Standards Branch, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7759.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0967; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the mandatory continuing airworthiness information (MCAI), the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations (phone: 800-647-5527) is listed above. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Robert Green, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7754; fax: 781-238-7199; email: robert.green@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2017-0967; Product Identifier 2017-NE-35-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. We will consider all

comments received by the closing date and may amend this NPRM because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this NPRM.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD 2017-0151, dated August 18, 2017 (referred to hereinafter as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

A recent design review identified the possibility of failure of the power turbine (PT) or quill shaft splines.

This condition, if not corrected, could lead to a PT rotor overspeed, with consequent release of PT blade(s), possibly resulting in high energy debris and damage to, and/or reduced control of, the aeroplane.

To address this potential unsafe condition, GE Aviation Czech (GEAC) designed a modification (mod) of the engine outlet system and issued Alert Service Bulletins (ASB) ASB-M601E-72-00-00-0070, ASB-M601D-72-00-00-0053, ASB-M601F-72-00-00-0036, ASB-M601T-72-00-00-0029, ASB-M601Z-72-00-00-0039, ASB-H75-72-00-00-0011, ASB-H80-72-00-00-0025 and ASB-H85-72-00-00-0007 (single document, hereafter referred to as “the ASB” in this AD), providing instructions for modification of engines in service.

For the reason described above, this AD requires modification of the affected engines, and prohibits installation of pre-mod parts.

You may obtain further information by examining the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0967.

Related Service Information under 1 CFR Part 51

We reviewed GE Aviation Czech Alert Service Bulletin (ASB) ASB-M601E-72-00-00-0070 [02], ASB-M601D-72-00-00-0053 [02], ASB-M601F-72-00-00-0036 [02], ASB-M601T-72-00-00-0029 [02], ASB-M601Z-72-00-00-0039 [02], ASB-H75-72-00-00-0011 [02], ASB-H80-72-00-00-0025 [02], and ASB-H85-72-00-00-0007 [02] (single document), dated June 12, 2017. The ASB describes procedures for removal and replacement of the engine outlet system hardware. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA's Determination and Requirements of This Proposed AD

This product has been approved by the aviation authority of the Czech Republic and is approved for operation in the United States. Pursuant to our bilateral agreement with the European Community, EASA has notified us of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design. This proposed AD would require installing a modified engine outlet system.

Costs of Compliance

We estimate that this proposed AD affects 167 engines installed on airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated Costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Remove and replace exhaust system parts	64 work-hours x \$85 per hour = \$5,440	\$63,000	\$68,440	\$11,429,480

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to engines, propellers, and associated appliances to the Manager, Engine and Propeller Standards Branch, Policy and Innovation Division.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

GE Aviation Czech s.r.o. (Type Certificate previously held by WALTER Engines a.s., Walter a.s., and MOTORLET a.s.); Docket No. FAA-2017-0967; Product Identifier 2017-NE-35-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to GE Aviation Czech s.r.o. M601D-11, M601E-11, M601E-11A, M601E-11AS, M601E-11S, M601F, H75-100, H75-200, H80, H80-100, H80-200, H85-100, and H85-200 turboprop engines.

(d) Subject

Joint Aircraft System Component (JASC) Code 7810, Engine Collector/Tailpipe/Nozzle.

(e) Reason

This AD was prompted by a review by the manufacturer that identified the possibility of a power turbine (PT) overspeed and the uncontained release of PT blades. We are issuing this AD to prevent uncontained release of the PT blades. The unsafe condition, if not addressed, could result in failure of the PT blades, uncontained release of the blades, damage to the engine, and damage to the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

(1) After the effective date of this AD, replace the parts listed in Tables 2, 3, 4, and 5 to paragraph (g) of this AD with the parts identified in Planning Information, Paragraph 1.5, Sections I through IV, respectively, in GE Aviation Czech Alert Service Bulletin (ASB) ASB-M601E-72-00-00-0070 [02], ASB-M601D-72-00-00-0053 [02], ASB-M601F-72-00-00-0036 [02], ASB-M601T-72-00-00-0029 [02], ASB-M601Z-72-00-00-0039 [02], ASB-H75-72-00-00-0011 [02], ASB-H80-72-00-00-0025 [02], and ASB-H85-72-00-00-0007 [02] (single document), dated June 12, 2017, at the times specified below, whichever occurs first:

- (i) during the next engine shop visit; or
- (ii) within 6,600 engine equivalent cycles since new or since last overhaul; or
- (iii) within the compliance times specified in Table 1 to paragraph (g) of this AD.

Table 1 to Paragraph (g) – Compliance Times

Date of Engine Manufacture	Date of Release to Service after last Shop Visit	Compliance Time
December 31, 2008 or before	Never subjected to engine shop visit	5 years
January 1, 2009 or later		10 years
any	February 9, 2014 or before	5 years
any	February 10, 2014 or later	10 years

Table 2 to Paragraph (g) – Exhaust Systems M601-4.2, M601-4.5, M601-4.51, M601-4.52, M601-4.61, and M601-4.62

Engine models	Part Name	Part Number (P/N)
M601E-11, M601E-11A, M601E-11AS, M601E-11S, M601F, H75-100, H75-200, H80, H80-100, H80-200, H85-100, and H85-200	Containment Ring	M601-426.5
	Insulation Cover	M601-422.3, M601-422.2
	Supporting Cone	M601-457.7, M601-457.3
	Support	M601-4512.5

Table 3 to Paragraph (g) – Exhaust System M601-4.1, M601-4.6, and M601-4.7

Engine models	Part Name	P/N
M601D-11, M601E-11, M601E-11A, M601E-11AS, M601E-11S	Containment Ring	M601-426.5
	Insulation Cover	M601-422.3, M601-422.2
	Support	M601-4512.5
	Supporting Cone	M601-457.7, M601-457.3
	Outlet Duct	M601-416.6

Table 4 to Paragraph (g) – Countershaft Case Complete (Reduction Gearbox Subassembly) M601-62.2, M601-62.7, M601-60.3

Engine models	Part Name	P/N
All	Bolt	M601-6170.9
	Ring	M601-6014.9

Table 5 – Torquemeter (Reduction Gearbox Subassembly) M601-673.6, M601-667.7, M601-605.3

Engine models	Part Name	P/N
All	Torquemeter Holder	M601-643.9

(2) Reserved.

(h) Installation Prohibition

(1) Do not install a part with a P/N listed in Tables 2, 3, 4, or 5 to paragraph (g) of this AD on an engine after that engine has been modified as required by paragraph (g) of this AD.

(2) After the effective date of this AD, do not install a part with a P/N listed in Tables 2, 3, 4, or 5 to paragraph (g) of this AD on any engine manufactured on or after September 1, 2017.

(i) Definition

For the purpose of this AD, an engine shop visit is when the engine is overhauled or rebuilt, or the PT is disassembled.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, ECO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ECO Branch, send it to the attention of the person identified in paragraph (k). You may email your request to: ANE-AD-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(k) Related Information

(1) For more information about this AD, contact Robert Green, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7754; fax: 781-238-7199; email: robert.green@faa.gov.

(2) Refer to MCAI European Aviation Safety Agency AD 2017-0151, dated August 18, 2017, for more information. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2017-0967.

(3) For service information identified in this AD, contact GE Aviation Czech s.r.o., Beranových 65, 199 02 Praha 9 – Letňany, Czech Republic; phone: +420 222 538 111; fax: +420 222 538 222. You may view this referenced service information at the FAA, Engine & Propeller Standards Branch, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7759.

Issued in Burlington, Massachusetts, on January 17, 2018.

Robert J. Ganley,
Manager, Engine and Propeller Standards Branch,
Aircraft Certification Service.
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